

## Prof. NİHAL AYDOĞAN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, University of Wisconsin-Madison, Faculty Of Engineering, Chemical Engineering , United States Of America  
1996 - 2001

Postgraduate, Middle East Technical University, Faculty Of Engineering, Kimya Mühendisliği, Turkey 1994 - 1996

Undergraduate, Ankara University, Faculty Of Engineering, Department Of Chemistry Engineering, Turkey 1988 - 1992

### Research Areas

Health Sciences, Pharmacology and Therapeutics, Pharmaceutics Technology, Pharmaceutical Technology,  
Biopharmaceutical and Pharmacokinetics, Chemical Engineering and Technology, Life Sciences, Biotechnology,  
Biomaterial, Chemistry, Physical Chemistry, Interface Chemistry, Natural Sciences, Engineering and Technology

### Academic Titles / Tasks

Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2011 - Continues

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2004 - 2011

Lecturer, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2001 - 2004

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Chemical Engineering, 1994  
- 1996

### Academic and Administrative Experience

Hacettepe Üniversitesi, Kimya Mühendisliği Bölümü, Temel İşlemler Ve Termodinamik , 2019 - Continues

Deputy Head of Department, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2020 - 2022

Hacettepe Üniversitesi, Kimya Mühendisliği Bölümü, Temel İşlemler Ve Termodinamik, 2013 - 2016

Hacettepe Üniversitesi, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2008 - 2011

### Supervised Theses

Aydođan N., Preparation and characterization of lipid-based smart nanostructures and investigation of their potential usage in breast cancer combined therapy, Postgraduate, Ç.ERSÖZ(Student), 2023

Aydođan N., Kalıpcılar H., pH DUYARLI ÇOKLU İLAÇ SALIMI İÇİN METAL ORGANİK ÇERÇEVE TEMELLİ MİKRO KAPSÜLLERİN HAZIRLANMASI VE KARAKTERİZASYONU, Postgraduate, E.UYSAL(Student), 2023

Aydođan N., Kalaycıođlu G. D., Beyin tümörü tedavisinde antikanser ilaçlarının nazal yolla aktarımı için lipit temelli taşıyıcıların geliştirilmesi, Postgraduate, B.ÖKMEN(Student), 2021

Aydođan N., Meme Kanseri Tedavisinde Kontrollü İlaç Taşınım Sistemi Olarak Lipit Nanotüplerin Kullanım Potansiyelinin İncelenmesi, Postgraduate, A.NAZLI(Student), 2019

Aydođan N., Lipit bazlı organik nanoyapıların hidrojellerin adezyonunda kullanılma potansiyelinin incelenmesi, Postgraduate, M.ÖZKAN(Student), 2018

Aydođan N., Hava-su ara yüzeyinde çeşitli nanoyapıların kendiliğinden kümeleşerek oluşturulması ve elde edilen nanoyapıların karakterizasyonu, Postgraduate, D.ŞENYÜREK(Student), 2018

Aydođan N., Çeşitli hastalıkların tedavisinde kullanılan ilaçların ve ilaç yüklü taşıyıcıların alveoller ve akciđer yüzey aktif maddesi ile olası etkileşiminin incelenmesi, Postgraduate, M.GÖKDEMİR(Student), 2018

Aydođan N., Pulmoner mukus tabakasına yönelik ilaç taşıyıcı sistemlerin geliştirilmesi, Doctorate, G.ALP(Student), 2018

Aydođan N., Tabaka tabaka kaplama metodu kullanılarak hazırlanan ilaç yüklü kontak lenslerden kontrollü ilaç salımı, Postgraduate, N.ERCİOđLU(Student), 2018

AYDOĐAN N., PREPARATION AND INVESTIGATION OF PH-SENSITIVE HYDROGELS/NANOPARTICLES FOR DRUG DELIVERY., Postgraduate, A.ALAELDIN(Student), 2018

AYDOĐAN N., Katı lipit nanopartiküller kullanılarak koloidal mikrokapsül üretimi, Doctorate, G.DİCLE(Student), 2017

AYDOĐAN N., Manyetit-altın hibrit nanopartiküllerin sentezi, karakterizasyonu ve mikroyapıların eldesinde kullanılması, Doctorate, E.ALP(Student), 2017

AYDOĐAN N., Dođal akciđer yüzey aktif maddesinin arayüzey davranışı üzerine nanopartiküllerin etkisi, Postgraduate, V.PINARBAŞI(Student), 2015

AYDOĐAN N., Katanyonik moleküller kullanılarak kendiliğinden kümeleşme yoluyla nano/mikro boyutlu yapıların oluşturulması ve karakterizasyonu, Postgraduate, E.GÜLCAN(Student), 2015

AYDOĐAN N., Özel tasarım yüzey aktif maddeler kullanılarak nano/mikro boyutlu tübüler yapıların oluşturulması,karakterizasyonu ve uygulamaları, Doctorate, H.ÜNSAL(Student), 2014

AYDOĐAN N., Akciđer ara yüzey modelinde kan proteinleri - sentetik surfaktant/lipid karışımlarının dinamik adsorpsiyon davranışına molekül yapısı etkisinin incelenmesi, Postgraduate, G.DİLLİ(Student), 2012

AYDOĐAN N., Nanopartikül kümelerinin çözelti davranışlarının tersinir kontrolünde oligonükleotidlerin kullanımı, Postgraduate, N.EGEMEN(Student), 2012

AYDOĐAN N., Fibrinojenin arayüzeye adsorpsiyonuna polioksietilen zinciri içeren yüzey aktif maddelerinin etkisi, Postgraduate, İ.SÖZEN(Student), 2011

AYDOĐAN N., Yüzey aktif maddelerle dekore edilmiş nanopartiküllerin model hücre membranı ile fiziksel etkileşiminin incelenmesi, Postgraduate, G.DİCLE(Student), 2011

AYDOĐAN N., Yüzeyi modifiye edilmiş nanopartiküllerin arayüzey özellikleri: Yüzey aktif malzemeler, Postgraduate, B.DAđLAR(Student), 2010

AYDOĐAN N., Akciđer yüzey aktif maddeleri-hibrit yüzey aktif maddeleri karışımlarının kan proteinleri ile etkileşimi, Postgraduate, B.USLU(Student), 2009

AYDOĐAN N., Akciđer yüzey aktif maddelerinin hibrit yüzey aktif maddelerle etkileşimi, Postgraduate, H.TANACI(Student), 2009

AYDOĐAN N., Hibrit yüzey aktif maddeleri kullanılarak çok bölmeli misellerin elde edilmesi, Postgraduate, H.ÜNSAL(Student), 2008

AYDOĐAN N., Redoks aktif katyonik yüzey aktif madde sentezi ve karakterizasyonu, Postgraduate, F.AYDEMİR(Student), 2007

AYDOĐAN N., Redoks aktif katyonik ve anyonik yüzey aktif madde karışımlarının sinerjik etkileşimleri, Postgraduate, M.ARGUN(Student), 2006

AYDOĐAN N., Yüksek performanslı redoks aktif yüzey aktif maddesi tasarımı ve karakterizasyonu, Postgraduate, N.ALDIŞ(Student), 2004

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Preparation and investigation of Janus structured micro/nano carriers: Release kinetics of multiple drugs**  
Ökmen Altaş B., Kolay F., Kalaycioglu G. D., Aydogan N.  
JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, vol.105, pp.106631, 2025 (SCI-Expanded)
- II. **Gold nanoparticles decorated FOLFIRINOX loaded liposomes for synergistic therapy of pancreatic cancer**  
Aydoğan N.  
INTERNATIONAL JOURNAL OF PHARMACEUTICS, vol.669, pp.1-10, 2025 (SCI-Expanded)
- III. **Clinic-oriented injectable smart material for the treatment of diabetic wounds: Coordinating the release of GM-CSF and VEGF**  
Kinali H., Kalaycioglu G. D., Boyacioglu O., Korkusuz P., Aydoğan N., Vargel İ.  
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.276, 2024 (SCI-Expanded)
- IV. **Stimuli-Responsive Nanoplatfoms: ZIF-8-Decorated Ferrocenyl Surfactant-Based Vesicles for Synergistic Therapeutic Applications**  
Uysal E., Yavas S. G., Kalaycioglu G. D., Polat M., Kalipcilar H., Aydogan N.  
ADVANCED MATERIALS INTERFACES, vol.1, no.1, pp.1-12, 2024 (SCI-Expanded)
- V. **Multi-Stimuli-Responsive Tadpole-like Polymer/Lipid Janus Microrobots for Advanced Smart Material Applications.**  
Ökmen Altaş B., Goktas C., Topcu G., Aydogan N.  
ACS APPLIED MATERIALS & INTERFACES, vol.16, no.12, pp.15533-15547, 2024 (SCI-Expanded)
- VI. **Tadpole-Like Anisotropic Polymer/Lipid Janus Nanoparticles for Nose-to-Brain Drug Delivery: Importance of Geometry, Elasticity on Mucus-Penetration Ability.**  
ÖKMEN ALTAŞ B., KALAYCIOĞLU G. D., Lifshiz-Simon S., Talmon Y., AYDOĞAN N.  
Molecular pharmaceutics, vol.21, no.2, pp.633-650, 2024 (SCI-Expanded)
- VII. **Biophysical interaction of gold nanoparticles with model biological membranes: Investigation of the effect of geometry on cellular uptake and photothermal performance**  
Kalaycioglu G. D., Ökmen Altaş B., Aydogan N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.676, 2023 (SCI-Expanded)
- VIII. **The effect of the gold nanoparticles and gold nano-clusters on the behavior of natural lung surfactant**  
Ozcan V. P., Ökmen Altaş B., Kalaycioglu G. D., Ergul E., Aydogan N.  
Journal of Molecular Liquids, vol.387, 2023 (SCI-Expanded)
- IX. **Trojan-like doxorubicin and gold nanoparticle entrapped smart nanostructured lipid carriers for breast cancer synergistic chemo/photothermal therapy**  
Okuyucu C. E., KALAYCIOĞLU G. D., KAÇAROĞLU D., ÖZDEN A. K., AYDOĞAN N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.672, 2023 (SCI-Expanded)
- X. **Nanoparticle adsorption induced configurations of nematic liquid crystal droplets**  
Sengul S., AYDOĞAN N., BÜKÜŞOĞLU E.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.608, pp.2310-2320, 2022 (SCI-Expanded)
- XI. **Interfacial properties and aggregates of novel redox-active surfactant to synthesize silver nanoparticles at the air/water interface**  
KALAYCIOĞLU G. D., Yuksel D., ÖKMEN B., AYDOĞAN N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.624, 2021 (SCI-Expanded)
- XII. **Fluorocarbon/hydrocarbon hybrid surfactant decorated gold nanoparticles and their interaction with model cell membranes**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
Journal of Molecular Liquids, vol.326, 2021 (SCI-Expanded)
- XIII. **pH-Sensitive Polymeric Poly (epsilon-caprolactone) Core- Chitosan/Alginate Shell Particle System for Oral Insulin Delivery**

- KALAYCIOĞLU G. D., Elamin A. A., Kinali H., AYDOĞAN N.  
CHEMISTRYSELECT, vol.6, no.4, pp.695-704, 2021 (SCI-Expanded)
- XIV. **Custom-made lipid nanotubes as a tissue and hydrogel adhesive**  
AYDOĞAN N., KALAYCIOĞLU G. D., Unsal H., Ozkan M.  
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, vol.608, 2021 (SCI-Expanded)
- XV. **Lipid-based mucus penetrating nanoparticles and their biophysical interactions with pulmonary mucus layer**  
ALP G., AYDOĞAN N.  
European Journal of Pharmaceutics and Biopharmaceutics, vol.149, pp.45-57, 2020 (SCI-Expanded)
- XVI. **Layer-by-layer coated microcapsules with lipid nanodomains for dual-drug delivery**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.584, 2020 (SCI-Expanded)
- XVII. **Smart Lipid Nanotubes for Easy Formation of Gold-Lipid Hybrid Nanotubes and Tunable Gold Superstructures**  
Unsal H., Kalaycioglu G. D., Aydogan N., Karakuscu N.  
CHEMISTRYSELECT, vol.4, no.35, pp.10276-10287, 2019 (SCI-Expanded)
- XVIII. **Enhancing the Spreading Behavior on Pulmonary Mucus Mimicking Subphase via Catanionic Surfactant Solutions: Toward Effective Drug Delivery through the Lungs**  
ALP G., AYDOĞAN N.  
MOLECULAR PHARMACEUTICS, vol.15, no.3, pp.1361-1370, 2018 (SCI-Expanded)
- XIX. **Synthesis and characterization of Fe<sub>3</sub>O<sub>4</sub>-MPTMS-PLGA nanocomposites for anticancer drug loading and release studies**  
Dincer C. A., Yildiz N., Karakecili A., AYDOĞAN N., Calimli A.  
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.45, no.7, pp.1408-1414, 2017 (SCI-Expanded)
- XX. **Preparation and investigation of solid lipid nanoparticles for drug delivery**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, vol.510, pp.77-86, 2016 (SCI-Expanded)
- XXI. **A comparative study: Synthesis of superparamagnetic iron oxide nanoparticles in air and N<sub>2</sub> atmosphere**  
Alp E., AYDOĞAN N.  
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, vol.510, pp.205-212, 2016 (SCI-Expanded)
- XXII. **Stimuli-responsive lipid nanotubes in gel formulations for the delivery of doxorubicin**  
Ilbasemis-Tamer S., Unsal H., Tugcu-Demiroz F., KALAYCIOĞLU G. D., Degim I. T., AYDOĞAN N.  
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.143, pp.406-414, 2016 (SCI-Expanded)
- XXIII. **Dual-Responsive Lipid Nanotubes: Two-Way Morphology Control by pH and Redox Effects**  
Unsal H., SCHMIDT J., TALMON Y., Yildirim L., AYDOĞAN N.  
LANGMUIR, vol.32, no.21, pp.5324-5332, 2016 (SCI-Expanded)
- XXIV. **Dual-Responsive Lipid Nanotubes: Two-Way Morphology Control by pH and Redox Effects**  
YILDIRIM L., Unsal H., Schmidt J., Talmon Y., AYDOĞAN N.  
ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES, vol.72, 2016 (SCI-Expanded)
- XXV. **New stimuli responsive lipid nanotube for protein transport and release: From molecular design to application**  
Unsal H., AYDOĞAN N.  
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, vol.250, 2015 (SCI-Expanded)
- XXVI. **Effect of operational parameters and recycling load on the high pressure grinding rolls (HPGR) performance**  
ÖZCAN Ö., AYDOĞAN N., Benzer H.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.136, pp.20-25, 2015 (SCI-Expanded)
- XXVII. **Quantitative Characterization of Magnetic Mobility of Nanoparticle in Solution-Based Condition**

- RODOPLU D., BOYACI İ. H., BOZKURT A. G., EKSI H., Zengin A., Tamer U., AYDOĞAN N., ÖZCAN Ş., Tugcu-Demiroz F. CURRENT PHARMACEUTICAL DESIGN, vol.21, no.37, pp.5389-5400, 2015 (SCI-Expanded)
- XXVIII. **A comparative study of Fe<sub>3</sub>O<sub>4</sub> nanoparticles modified with different silane compounds**  
Dincer C. A., Yildiz N., AYDOĞAN N., Calimli A.  
APPLIED SURFACE SCIENCE, vol.318, pp.297-304, 2014 (SCI-Expanded)
- XXIX. **Restoration of the interfacial properties of lung surfactant with a newly designed hydrocarbon/fluorocarbon lipid**  
Dilli G., Unsal H., USLU B., AYDOĞAN N.  
Colloids and Surfaces B: Biointerfaces, vol.122, pp.566-575, 2014 (SCI-Expanded)
- XXX. **Formation of chiral nanotubes by the novel anthraquinone containing-achiral molecule**  
Unsal H., AYDOĞAN N.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.394, pp.301-311, 2013 (SCI-Expanded)
- XXXI. **Fluorocarbon-hydrocarbon hybrid gold NPs synthesized by bulk exchange reactions and surface coatings of fluorocarbon coated gold NPs are increased**  
DAGLAR B., AYDOĞAN N.  
COLLOIDS AND SURFACES A-PHYSICO-CHEMICAL AND ENGINEERING ASPECTS, vol.419, pp.257-262, 2013 (SCI-Expanded)
- XXXII. **Novel boron specific copolymers with quaternary amine segments for efficient boron removal via PEUF**  
Zerze H., Ozbelge H. O., Bicak N., AYDOĞAN N., YILMAZ L.  
DESALINATION, vol.310, pp.169-179, 2013 (SCI-Expanded)
- XXXIII. **Imino-bis-propane diol functional polymer for efficient boron removal from aqueous solutions via continuous PEUF process**  
Zerze H., Karagöz B., Ozbelge H. O., Bicak N., AYDOĞAN N., YILMAZ L.  
DESALINATION, vol.310, pp.158-168, 2013 (SCI-Expanded)
- XXXIV. **Biophysical investigation of the interfacial properties of cationic fluorocarbon/hydrocarbon hybrid surfactant: Mimicking the lung surfactant protein C**  
AYDOĞAN N., USLU B., TANACI H.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.360, no.1, pp.163-174, 2011 (SCI-Expanded)
- XXXV. **Simulation assisted capacity improvement of cement grinding circuit: Case study cement plant**  
DÜNDAR H., Benzer H., AYDOĞAN N., ALTUN O., TOPRAK N. A., ÖZCAN Ö., EKŞİ D., Sargin A.  
MINERALS ENGINEERING, vol.24, pp.205-210, 2011 (SCI-Expanded)
- XXXVI. **Use of Specifically Tailored Chelating Polymers for Boron Removal from Aqueous Solutions by Polymer Enhanced Ultrafiltration**  
Doganay C. O., Ozbelge H. O., Bicak N., AYDOĞAN N., YILMAZ L.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.46, no.4, pp.581-591, 2011 (SCI-Expanded)
- XXXVII. **A highly sensitive detection platform based on surface-enhanced Raman scattering for Escherichia coli enumeration**  
Temur E., BOYACI İ. H., Tamer U., Unsal H., AYDOĞAN N.  
ANALYTICAL AND BIOANALYTICAL CHEMISTRY, vol.397, no.4, pp.1595-1604, 2010 (SCI-Expanded)
- XXXVIII. **Removal of Heavy Metals from Multicomponent Metal Mixtures by Polymer Enhanced Ultrafiltration: Effects of pH, Ionic Strength and Conformational Changes in Polymer Structure**  
Kadioglu S. I., YILMAZ L., AYDOĞAN N., Ozbelge H. O.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.45, no.10, pp.1363-1373, 2010 (SCI-Expanded)
- XXXIX. **A New Strategy To Form Multicompartment Micelles: Fluorocarbon-Hydrocarbon Ion-Pair Surfactant**  
Unsal H., AYDOĞAN N.  
LANGMUIR, vol.25, no.14, pp.7884-7891, 2009 (SCI-Expanded)
- XL. **Tuning surface tension and aggregate shape via a novel redox active fluorocarbon-hydrocarbon hybrid surfactant**  
Aydogan N., ALDIS N.  
LANGMUIR, vol.22, no.5, pp.2028-2033, 2006 (SCI-Expanded)

- XLI. Novel antifoam for fermentation processes: Fluorocarbon-hydrocarbon hybrid unsymmetrical bolaform surfactant**  
CALIK P., ILERI N., ERDINC B., Aydogan N., ARGUN M.  
LANGMUIR, vol.21, no.19, pp.8613-8619, 2005 (SCI-Expanded)
- XLII. Treatment by nanofiltration of the bleed stream of a continuous alcohol fermentor**  
Aydogan N., GURKAN T., YILMAZ L.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.39, no.5, pp.1059-1072, 2004 (SCI-Expanded)
- XLIII. Interfacial and bulk properties of the new fluorocarbon-hydrocarbon hybrid unsymmetrical bolaform surfactant**  
Aydogan N., ALDIS N., GUVENIR O.  
LANGMUIR, vol.19, no.26, pp.10726-10731, 2003 (SCI-Expanded)
- XLIV. Effect of electrolyte concentration on interfacial and bulk solution properties of ferrocenyl surfactants with anionic headgroups**  
Aydogan N., ABBOTT N. L.  
Langmuir, vol.18, no.21, pp.7826-7830, 2002 (SCI-Expanded)
- XLV. Reassessment of the surface activity of ferrocenyldimethylammonium surfactants**  
Aydogan N., ROSSLEE C. A., Abbott N. L.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.201, pp.101-109, 2002 (SCI-Expanded)
- XLVI. Interfacial properties of unsymmetrical bolaform amphiphiles with one ionic and one nonionic head group**  
Aydogan N., ABBOTT N. L.  
Journal of Colloid and Interface Science, vol.242, no.2, pp.411-418, 2001 (SCI-Expanded)
- XLVII. Comparison of the surface activity and bulk aggregation of ferrocenyl surfactants with cationic and anionic headgroups**  
Aydogan N., ABBOTT N. L.  
Langmuir, vol.17, no.19, pp.5703-5706, 2001 (SCI-Expanded)
- XLVIII. A Molecular-Thermodynamic Model for Gibbs Monolayers Formed from Redox-Active Surfactants at the Surfaces of Aqueous Solutions: Redox-Induced Changes in Surface Tension**  
Aydogan N., GALLARDO B. S., ABBOTT N. L.  
Langmuir, vol.15, no.3, pp.722-727, 1999 (SCI-Expanded)
- XLIX. Effect of operating parameters on the separation of sugars by nanofiltration**  
Aydođan N., GÜRKAN T., YILMAZ L.  
Separation Science and Technology, vol.33, no.12, pp.1767-1785, 1998 (SCI-Expanded)

## Articles Published in Other Journals

- Chemosensitizer Loaded NIR-Responsive Nanostructured Lipid Carriers: A Tool for Drug-Resistant Breast Cancer Synergistic Therapy**  
Okuyucu C. E., KALAYCIOđLU G. D., Ozden A. K., AYDOđAN N.  
ACS APPLIED BIO MATERIALS, 2025 (ESCI)

## Papers Published in Refereed Scientific Meetings

- Synergistic Therapy of Breast Cancer by NIR-Responsive Nanostructured Lipid Carriers Containing Gold Nanorods**  
Aydođan N.  
36th ECIS conference, Hania, Greece, 4 - 11 September 2022, pp.1
- Preparation and investigation of lipid nanotubes as tissue and hydrogel adhesives.**  
Aydođan N.

ECIS 2021, Athens, Greece, 5 - 10 September 2021, pp.1

- III. **Colloidal Capsules for Combined Therapy**  
AYDOĞAN N., KALAYCIOĞLU G. D.  
31th Conference of Colloids and Interface Science Society, Madrid, Spain, 3 - 08 September 2017
- IV. **Solidification of Magnetic Liquid Marbles**  
ALP E., COLAK A. G., AYDOĞAN N.  
ECIS 2016, 4 - 09 November 2016
- V. **STIMULI RESPONSIVE LIPID NANOTUBES FOR DRUG AND PROTEIN DELIVERY**  
ÜNSAL H., AYDOĞAN N.  
Aiche 2016, 13 - 18 October 2016
- VI. **Dual Responsive Lipid Nanotubes Two Way Morphology Control by pH and Redox Effects**  
YILDIRIM L., ÜNSAL H., Schmidt J., Talmon Y., AYDOĞAN N.  
30th Meeting of the European Crystallographic Meeting, 28 August - 01 September 2016
- VII. **STIMULI RESPONSIVE LIPID NANOTUBES GEL COMPLEXES FOR DOXORUBICIN DELIVERY**  
İLBASMIŞ TAMER S., ÜNSAL H., tugcu demiroz f., KALAYCIOĞLU G. D., DEĞİM İ. T., AYDOĞAN N.  
ecis 2016, 4 - 09 September 2016
- VIII. **DOKSORUBİSİN SALIMI İÇİN YENİ UYARI CEVAP LİPİT NANOTÜP JEL KOMPLEKS SİSTEMİ**  
İLBASMIŞ TAMER S., ÜNSAL H., tugcu demiroz f., KALAYCIOĞLU G. D., DEĞİM İ. T., AYDOĞAN N.  
UKMK 12, Turkey, 23 - 26 August 2016
- IX. **Preparation Characterization and Self Assembly of Solid Lipid Nanoparticles**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
Aiche, 8 - 13 November 2015
- X. **Self Assembled Doxorubicin Containing Lipid Nanotubes for Intracolonic Administrations**  
İLBASMIŞ TAMER S., ÜNSAL H., KALAYCIOĞLU G. D., FATMANUR T., DEĞİM İ. T., AYDOĞAN N.  
2015 AAPS Annual Meeting and Exposition, 25 October 2015 - 29 January 2016
- XI. **The New Lipid Nanotube for Protein Entrapment and Release**  
ÜNSAL H., AYDOĞAN N.  
29th Conference of the European Colloid and Interface Science, 6 - 11 September 2015
- XII. **Spreading of Catanionic Surfactant Mixtures on Pulmonary Mucus Layer**  
ALP G., AYDOĞAN N.  
29th Conference of the European Colloid and Interface Science ECIS, 6 - 11 September 2015
- XIII. **A comparative Study Synthesis of SPIONs in air vs N2 atmosphere**  
ALP E., AYDOĞAN N.  
29th Conference of the European Colloid and Interface Science ECIS, 6 - 11 September 2015
- XIV. **Dynamic Adsorption Behavior of Lung Surfactant Components and Effect of Fibrinogen**  
ALP G., AYDOĞAN N.  
29th Conference of the European Colloid and Interface Science ECIS, 6 - 11 September 2015
- XV. **Investigation of Solid Lipid Nanoparticles for Drug Delivery**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
29th Conference of the European Colloid and Interface Science ECIS, 6 - 11 September 2015
- XVI. **Synthesis and Characterization of Fe<sub>3</sub>O<sub>4</sub> Au Dumbbell Nanoparticles**  
ALP E., AYDOĞAN N.  
29th Conference of the European Colloid and Interface Science ECIS, 6 - 11 September 2015
- XVII. **The new stimuli responsive lipid nanotube for protein transport and release from molecular design to application**  
ÜNSAL H., AYDOĞAN N.  
American Chemical Society National Meeting (ACS), 16 - 20 August 2015
- XVIII. **The Stimuli Responsive Lipid Nanotubes for The Delivery of Pharmaceuticals**  
ÜNSAL H., AYDOĞAN N.  
15. International colloids and interface association conference IACIS, 24 - 29 May 2015
- XIX. **Sustaining a healthy respiration by preventing the adsorption of blood protein: Effect of novel ion**

### **pair surfactant**

Dilli G., AYDOĞAN N.

246th National Meeting of the American-Chemical-Society (ACS), Indiana, United States Of America, 8 - 12 September 2013, vol.246

### **XX. Smart lipid nanotubes: Two-way morphology control by pH and redox effects**

Unsal H., Schmidt J., Talmon Y., AYDOĞAN N.

246th National Meeting of the American-Chemical-Society (ACS), Indiana, United States Of America, 8 - 12 September 2013, vol.246

### **XXI. Effect of the Recycling Load on the High Pressure Grinding Rolls' Performance - A Case Study with the Industrial Unit During Cement Clinker Grinding**

DÜNDAR H., AYDOĞAN N., Benzer H., Lynch A. J.

10th Mill Operators Conference, Adelaide, Australia, 12 - 14 October 2009, pp.161-163

## **Supported Projects**

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Koloidal Mikrokapsül Temelli İkili İlaç Salım Sistemlerinin Geliştirilmesi, 2017 - 2019

AYDOĞAN N., TUBITAK Project, Katı Lipit Nanopartikül Kullanılarak Koloidal Mikrokapsül Üretimi, 2016 - 2018

AYDOĞAN N., ALP G., Project Supported by Higher Education Institutions, Nanoyapılı Lipid Taşıyıcıların Akciğer Mukus Tabakasından Penetrasyonu, 2017 - 2017

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Katı Lipit Nanopartiküllerin Sentezi Karakterizasyonu ve İlaç Taşınımında Kullanılabilirliğinin Araştırılması, 2017 - 2017

AYDOĞAN N., ALP G., Project Supported by Higher Education Institutions, İlaç Taşınım Sistemleri ile Akciğer Mukus Tabakasının Etkileşimlerinin İncelenmesi, 2016 - 2017

AYDOĞAN N., ALP E., Korkmaz G. Ş., Project Supported by Higher Education Institutions, Hipertermiya Uygulamasına Yönelik Manyetik Nanopartikül İçeren Nano Yapılı Lipid Taşıyıcıların NLC Sentezi ve İlaç Salım Mekanizma Parametrelerinin İncelenmesi, 2016 - 2017

AYDOĞAN N., Project Supported by Higher Education Institutions, Tabaka Tabaka Kaplama Methodu Kullanılarak Hazırlanan İlaç Yüklü Kontak Lenslerden Kontrollü İlaç Salımı, 2016 - 2017

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Katı Lipit Nanopartiküller Kullanılarak KendiKendine Kümeleşme Yöntemiyle Koloidal Mikrokapsüllerin Hazırlanması, 2016 - 2017

AYDOĞAN N., ALP E., Project Supported by Higher Education Institutions, ASİMETRİK HİBRİT AUFE304 NANOPARTİKÜLLERİN POLYOL YÖNTEMİYLE SENTEZİ VE KARAKTERİZASYONU, 2016 - 2017

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Katı Lipit Nanopartiküller Kullanılarak KendiKendine Kümeleşme Yoluyla Mikroküre Oluşturulması ve İlaç Taşınımında Kullanılabilirliğinin Araştırılması, 2016 - 2017

AYDOĞAN N., ALP G., Project Supported by Higher Education Institutions, KATANYONİK YÜZEY AKTİF MADDE KARIŞIMLARININ AKCİĞER MUKUS TABAKASI ÜZERİNDE YAYILIMI, 2016 - 2017

AYDOĞAN N., ÜNSAL H., Project Supported by Higher Education Institutions, Yeni bir Antrakınon İçerikli Akiral Molekül Kullanılarak Kiral Nanotüplerin Oluşumu, 2015 - 2016

AYDOĞAN N., TUBITAK Project, Akciğerlerde Sağlıklı Solunumun Sürdürülebilmesinde Özel Yüzey Aktif Maddelerinin Kullanımı, 2013 - 2016

AYDOĞAN N., Project Supported by Higher Education Institutions, Yüzeyi Özel Olarak Modifiye Edilmiş Altın Nanopartiküllerin Sentezi ve Model Endotel Hücre Membranı ile Etkileşiminin İncelenmesi, 2011 - 2016

AYDOĞAN N., ÜNSAL H., Project Supported by Higher Education Institutions, İlaç Taşınımı için Dış Etkilere Cevap Veren Lipid Nanotüpler, 2015 - 2015

AYDOĞAN N., TUBITAK Project, Yüzeyi Modifiye Edilmiş Nanopartiküllerin Arayüzey Özellikleri :Yüzey Aktif Malzemeler, 2007 - 2011

AYDOĞAN N., TUBITAK Project, Yüzey Aktif Maddelerinin Nanoteknoloji ve Eczacılıktaki Uygulamaları, 2006 - 2010



## **Metrics**

Publication: 87

Citation (WoS): 792

Citation (Scopus): 884

H-Index (WoS): 18

H-Index (Scopus): 19

## **Congress and Symposium Activities**

9th Eastern Mediterrean Chemical Engineering Conference, Attendee, Ankara, Turkey, 2018

16th Conference of the International Association of Colloid and Interface Scientists, Attendee, Rotterdam, Netherlands, 2018

31st Conference of the European Colloid and Interface Society, Attendee, Madrid, Spain, 2017

Aiche- American Institute of Chemical Engineering, Attendee, California, United States Of America, 2016

30rd Conference of the European Colloid and Interface Society, Attendee, Rome, Italy, 2016

29th Conference of the European Colloid and Interface Society, Attendee, Bordeaux, France, 2015

15th Conference of the International Association of Colloid and Interface Scientists, Attendee, Mainz, Germany, 2015

## **Invited Talks**

Conference, EMCC 9, 9th Eastern Mediterranean Chemical Engineering Conference, Turkey, August 2018

## **Awards**

AYDOĞAN N., TUBA-GEBİP "Üstün Nitelikli Genç Bilim İnsanı", Türkiye Bilimler Akademisi, May 2007

AYDOĞAN N., Genç Bilim Kadını, L'Oreal Türkiye, April 2007

Aydoğan N., Bilim Teşvik Ödülü, Hacettepe Üniversitesi, January 2007